AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of transmitting data packets received from a source via a non-constant delay medium, the non-constant delay medium introducing jitter into the data packets, the method comprising:

storing the data packets in a buffer, the data packets being part of a single transport stream that by definition includes first and second data packets that contain time stamps and plural data packets between the first and second data packets that do not contain time stamps;

determining a play-out schedule for the data packets based on the time stamps and an amount of data in the data packets, wherein the play-out schedule is determined without altering the time stamps timing information in the data packets; and

transmitting the data packets from the buffer in accordance with the play-out schedule, wherein the plural data packets are transmitted at a different rate than the first and second data packets in order to reduce the jitter; and

implementing a clock synchronization process that uses the time stamps to synchronize play-out of the data packets to a clock of the source.

2. (Currently Amended) The method of claim 1, wherein ~~two of the data packets contain time-stamps and~~ the play-out schedule is determined based on a difference between ~~the~~ time-stamps <u>in the first and second data packets</u>.

3. (Currently Amended) The method of claim 2, wherein the play-out schedule controls play-out of the ~~two~~ <u>first and second</u> data packets at times that correspond to the time-stamps.

4. (Currently Amended) The method of claim 2, wherein <u>plural</u> data packets that do not contain time-stamps are transmitted between the ~~two~~ <u>first and second</u> data packets such that a delay exists between ~~a~~ <u>the</u> second <u>data packet</u> ~~one of the two data packets~~ and a last one of the <u>plural</u> data packets ~~that do not contain time-stamps~~.

5. (Currently Amended) The method of claim <u>1</u> [[4]], wherein the <u>plural</u> data packets ~~that do not contain time-stamps~~ are transmitted at a higher rate <u>than the first and second data packets</u> ~~in order to reduce the delay~~.

6. (Currently Amended) The method of claim 1, further comprising:

identifying ~~a data~~ <u>the transport</u> stream ~~to which the data packets belong~~;

wherein the play-out schedule is also determined based on the identified ~~data~~ <u>transport</u> stream.

7. (Currently Amended) The method of claim 6, wherein the ~~data~~ transport stream is identified based on a packet identifier in ~~the two~~ at least one of the first and second data packets.

8. (Currently Amended) The method of claim 7, wherein the ~~data~~ transport stream comprises an MPEG (Motion Picture Experts Group) program stream that includes audio and video information.

9. (Currently Amended) The method of claim 1, further comprising:

storing data packets for a second transport stream in the buffer;

wherein, if the play-out schedule indicates that first ~~and~~ or second data packets are to be transmitted at the same time as a third data packet in the second transport stream, the method further comprises:

changing timing information in the ~~second~~ third data packet to indicate that the third ~~second~~ data packet is to be transmitted after the first or second data packet.

10. (Currently Amended) The method of claim 9, ~~wherein: the first and second data packets belong to first and second data streams, respectively; and the method further comprises~~ further comprising changing timing information in other packets in the second ~~data~~ transport stream.

11. (Currently Amended) The method of claim 1, further comprising:

determining an occupancy level of the buffer; and

changing a frequency of a clock signal used for play-out based on the occupancy level of

the buffer.

12. (Currently Amended) The method of claim 11, wherein the frequency of the clock

signal is changed so that the frequency corresponds to the frequency of a the clock of the source

signal that was used by a device to produce the data packets.

13. (Currently Amended) An apparatus for transmitting data packets received from a

source via a non-constant delay medium, the non-constant delay medium introducing jitter into

the data packets, the apparatus comprising:

a buffer which stores to store the data packets, the data packets being part of a single

transport stream that by definition includes first and second data packets that contain time stamps

and plural data packets between the first and second data packets that do not contain time

stamps;

a scheduler which determines to determine a play-out schedule for the data packets based

on the time stamps and an amount of data in the data packets, wherein the play-out schedule is

determined without altering the time stamps timing information in the data packets; and

an interface which transmits to transmit the data packets from the buffer in accordance

with the play-out schedule, wherein the plural data packets are transmitted at a different rate than

the first and second data packets in order to reduce the jitter; and

circuitry to implement a clock synchronization process that uses the time stamps to synchronize play-out of the data packets to a clock of the source.

14. (Currently Amended) The apparatus of claim 13, wherein ~~two of the data packets contain time-stamps and~~ the play-out schedule is determined based on a difference between the time-stamps in the first and second data packets.

15. (Currently Amended) The apparatus of claim 14, wherein the play-out schedule controls play-out of the ~~two~~ first and second data packets at times that correspond to the time-stamps.

16. (Currently Amended) The apparatus of claim 14, wherein the plural data packets that do not contain time-stamps are transmitted between the first and second ~~two~~ data packets such that a delay exists between ~~a second one of the two data packets~~ the second data packet and a last one of the plural data packets ~~that do not contain time-stamps~~.

17. (Currently Amended) The apparatus of claim 13 ~~16~~, wherein the plural data packets ~~that do not contain time-stamps~~ are transmitted at a higher rate than the first and second data packets ~~in order to reduce the delay~~.

18. (Currently Amended) The apparatus of claim 13, further comprising:

a classification engine which identifies ~~a data~~ the transport stream ~~to which the data~~

~~packets belong~~;

wherein the scheduler determines the play-out schedule also based on the identified

transport ~~data~~ stream.

19. (Currently Amended) The apparatus of claim 18, wherein the ~~data~~ transport stream

is identified based on a packet identifier in the ~~two~~ first and second data packets.

20. (Currently Amended) The apparatus of claim 19, wherein the ~~data~~ transport stream

comprises an MPEG (Motion Picture Experts Group) program stream that includes audio and

video information.

21. (Currently Amended) The apparatus of claim 13, wherein[,] data packets for a

second transport stream are stored in the buffer; and

if the play-out schedule indicates that first ~~and~~ or second data packets are to be

transmitted at the same time as a third data packet in the second transport stream, the scheduler

changes timing information in the ~~second~~ third data packet to indicate that the ~~second~~ third data

packet is to be transmitted after the first or second data packet.

22. (Currently Amended) The apparatus of claim 21, wherein: the first and second data packets belong to first and second data streams, respectively; and the scheduler changes timing information in other packets in the second ~~data~~ transport stream.

23. (Currently Amended) The apparatus of claim 13, further comprising a processor that determines an occupancy level of the buffer and that changes a frequency of a clock signal used for play-out based on the occupancy level of the buffer.

24. (Currently Amended) The apparatus of claim 23, wherein the frequency of the clock signal is changed so that the frequency corresponds to the frequency of ~~a~~ the clock signal that was used by the source ~~a device~~ to produce the data packets.

25. (Currently Amended) An apparatus for transmitting data packets received from a source via a non-constant delay medium ~~network~~, the non-constant delay medium introducing jitter into the data packets, the apparatus comprising:

means for storing the data packets in a buffer, the data packets being part of a single transport stream that by definition includes first and second data packets that contain time stamps and plural data packets between the first and second data packets that do not contain time stamps;

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means for determining a play-out schedule for the data packets based on <u>the time stamps</u>

<u>and an amount of data in the data packets, wherein the play-out schedule is determined without</u>

<u>altering the time stamps</u> ~~timing information in the data packets~~; ~~and~~

means for transmitting the data packets from the buffer in accordance with the play-out

schedule<u>, wherein the plural data packets are transmitted at a different rate than the first and</u>

<u>second data packets in order to reduce the jitter; and</u>

<u>means for implementing a clock synchronization process that uses the time stamps to</u>

<u>synchronize play-out of the data packets to a clock of the source.</u>

26. (Currently Amended) A computer program stored on a computer-readable medium

for transmitting data packets received from <u>a source via</u> a non-constant delay medium, <u>the non-</u>

<u>constant delay medium introducing jitter into the data packets,</u> the computer program comprising

instructions that cause a machine to:

store the data packets in a buffer<u>, the data packets being part of a single transport stream</u>

<u>that by definition includes first and second data packets that contain time stamps and plural data</u>

<u>packets between the first and second data packets that do not contain time stamps</u>;

determine a play-out schedule for the data packets based on <u>the time stamps and an</u>

<u>amount of data in the data packets, wherein the play-out schedule is determined without altering</u>

<u>the time stamps</u> ~~timing information in the data packets~~; ~~and~~

transmit the data packets from the buffer in accordance with the play-out schedule,

wherein the plural data packets are transmitted at a different rate than the first and second data

packets in order to reduce the jitter; and

implement a clock synchronization process that uses the time stamps to synchronize play-

out of the data packets to a clock of the source.